ABSTRACT OF THE DISCLOSURE

Various techniques are described for improving the performance of a shared-nothing database system in which at least two of the nodes that are running the shared-nothing database system have shared access to a disk. Specifically, techniques are provided for changing the ownership of data in a shared-nothing database without changing the location of the data on persistent storage. Because the persistent storage location for the data is not changed during a transfer of ownership of the data, ownership can be transferred more freely and with less of a performance penalty than would otherwise be incurred by a physical relocation of the data. Various techniques are also described for providing fast run-time reassignment of ownership. Because the reassignment can be performed during run-time, the shared-nothing system does not have to be taken offline to perform the reassignment.

Further, the techniques describe how the reassignment can be performed with relatively fine granularity, avoiding the need to perform bulk reassignment of large amounts of data across all nodes merely to reassign ownership of a few data items on one of the nodes.